# CalAmp Wireless Networks Corporation Waseca, MN U.S.A.

#### **ENGINEERING STATEMENT**

OF Dale E Jordan

The application consisting of the attached FCC form 731 has been prepared in support of a request for a Class II Permissive Change for NP4-5098-502.

## **EXISTING CONDITIONS**

The certification NP4-5098-502 has been granted to CalAmp Wireless Networks Corporation for its Viper 900 radio modem. The NP4-5098-502 certificate has been granted for several bit rates at 2, 4, 8, and 16-level FSK type of modulation scheme with a total of 16 emission designators. The change intends to add Part 22 to the existing FCC grant. There are no changes made to the hardware or firmware of the radio.

#### PROPOSED CONDITIONS

It is proposed to accept the request for the Viper 900 Transceiver/Modem for operation in the band of frequencies of 931-932 MHz associated with the paging channels of FCC Part 22. The applicant anticipates marketing the device for use in wireless transmission of data.

## PERFORMANCE MEASUREMENTS

No additional performance measurements were taken for this permissive change. The following table shows what rules of Part 22 apply to the existing test report that was filed for NP4-5098-502.

Name of Test	FCC Rule Part
Transmitter Rated Output Power	22.535
Transmitter Spurious and Harmonic Output	22.359
Frequency Stability with Variation in Supply Voltage	22.355
Frequency Stability with Variation in Ambient Temperature	22.355
Transmitter Occupied Bandwidth	22.359
Field Strength of Spurious Radiation	22.359

The following table shows which bands should be added to our existing grant.

Frequnecy Bands	Rule Part	Emission Designators
931 – 932 MHz	22	3K30 F1D, 3K55 F1D, 3K20 F1D, 3K45 F1D,
		8K20 F1D, 8K30 F1D, 8K50 F1D, 8K08 F1D, 16K5
		F1D, 16K8 F1D, 17K8 F1D, 17K0 F1D, 29K8 F1D,
		30K0 F1D, 29K5 F1D, 30K5 F1D

Calamp Wireless Networks Corporation hereby requests that our grant for NP4-5098-502 list frequencies outside of the FCC allocated Part 24, Part 90 and Part 101 frequencies. Calamp Wireless Networks Corporation acknowledges that it is a violation of FCC rules if the device operates on unauthorized frequencies. The device is professionally installed and it is up to the installer to determine if the device operates on authorized frequencies.

As per KDB 634817, the device was tested and complies with the more stringent standard between Part 22, 24, Part 90 and Part 101 across the frequency range 928-960MHz.

Dale E Jordan
R&D Test Engineer, CalAmp Wireless Networks Corporation.